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## Calusa Green, LLC Application for Planned Development Rezoning

## **Needs Analysis**

MSW Policy 2.3.1 of the 2050 Plan requires any proposed solid waste disposal facility "to prepare a Needs Analysis that supports the added disposal capacity proposed is required in order to service County residents." Charlotte County owns and operates its own Class 1 landfill, the Zemel Road Landfill. MSW Policy 2.3.1 requires an analysis of the existing landfill capacity and its ability to meet the future needs of County residents. The burden is on Calusa Green, LLC to show that disposal capacity beyond that provided by the Charlotte County landfill is needed to service County residents. The 2050 Plan, in FLU Policy 1.2.1, states that the planning horizon for the 2050 Plan is the year 2030, while the vision horizon is the year 2050. Thus, this needs analysis will focus on these two horizons.

In the Infrastructure –Solid Waste-Data and Analysis, that is the backup material to the 2050 Plan, it is stated that the Zemel Road Landfill has sufficient capacity to serve Charlotte County until the year 2027, with space to "expand the landfill and extend its operational life well past 2050." (Infrastructure-Solid Waste-Data and Analysis, July 2010 Adoption, p.1). This conclusion derives from what is described as "the most recent" Landfill Life Report which indicates that, in 2010, the Zemel Road Landfill has a remaining capacity of 4,674,295 cubic yards. (Id., at p. 5) The projection of landfill life is based on a number of factors, including the average per capita solid waste generation. (Id., at p. 6). According to the referenced Landfill Life Report, the per capita solid waste generation rate is 4.2 lbs/person/day. The Landfill Life Report, therefore, multiplied projected permanent populations by 1533 lbs/person/year (365 days x 4.2 lbs/person/day and then subtracted that product from the remaining cubic yard capacity. That calculation was repeated for each subsequent year in order to arrive at the 2027 landfill life date.

However, MSW Policy 1.1.2 of the 2050 Plan states that "(t)he County shall provide for the disposal of no less than 5.0 pounds of solid waste per permanent resident per day within the County's landfill. Charlotte County's standard procedure for reviewing zoning applications utilizes the adopted level of service numbers for demonstrating adequate capacity. This is consistent with general land use planning best practices. For example, new residential development must establish that there is sufficient water and sewer capacity at the plant that will service the proposed development. Though actual water and sewer usage may be below the County's adopted level of service, Charlotte County, consistent with best planning practice, requires the analysis to utilize the level of service and not actual usage when calculating water and sewer plant capacity. This is the same when Charlotte County analyzes each zoning application for approval or denial. Solid waste capacity is analyzed based on 5.0 pounds per permanent resident.

Consequently, the County's landfill life analysis for the 2050 Plan was flawed, inconsistent with MSW Policy 1.1.2, and inconsistent with best planning practice. If Charlotte County intends to meet its adopted level of service for Municipal Solid Waste, in compliance with MSW Policy 1.1.2, there is not enough capacity in the Zemel Road landfill. The analysis of landfill capacity must utilize adopted level of service similar to the County's analysis of every other prior zoning case.

Further, the County relies on land it owns adjacent to the landfill to support its contention that there is sufficient landfill capacity to meet the 2030 planning horizon and the 2050 vision horizon. The County does not have a Florida Department of Environmental Protection permit to expand its landfill operation onto the adjacent site. Funding to pursue such permit is not included in the County's five-year Capital Improvements Plan. Contrary again to best planning practice, facilities that are not funded, without a dedicated funding source and not even permitted cannot be included as committed in any level of service analysis. For instance, Charlotte County's review of rezoning cases does not allow sidestepping a lack of water and sewer capacity by stating that the County owns sufficient property adjacent to its treatment plant to expand that plant's capacity. Similarly, if traffic generated by a developer's project will exceed the adopted level of service on a particular two-lane road, a developer may not claim that there is actually ample roadway capacity because the County owns sufficient right-of-way to widen the pavement to four lanes.

When reviewing a needs analysis submitted by a private sector developer, the County does not permit the developer to assume that state and federal agencies will grant permits or that the County will allocate funds for necessary improvements. Future improvements may only be taken into consideration when they are a "committed" improvement where "committed" is defined as underway or funded in the County's five-year Capital Improvements Plan ("CIP").

Calusa Green, therefore, conducted a needs analysis by projecting capacity based on the County's population projections and the County's adopted level of service for Solid Waste. When the County's adopted level of service is used, rather than the lower level of service assumed in the 2050 Plan of 4.2 pounds of solid waste per permanent resident per day, there is an expected shortfall. The spread sheet replicating the data in the Infrastructure –Solid Waste-Data and Analysis is at Exhibit 15-1. A spread sheet utilizing the same data, but correcting the usage to 5.0 pounds of solid waste per permanent resident per day is at Exhibit 15-2.

When utilizing the adopted level of service, the life of the Zemel Road landfill is reduced from 2027 to 2026. Again utilizing adopted level of service together with the County's population projections, Charlotte County has a landfill capacity deficiency of 1,148,299 cubic yards from 2026 until the conclusion of the 2030 planning horizon. Additionally, since the expansion of the Zemel Road landfill is not a committed improvement, Calusa Green may assume in its analysis that County residents will have a need for additional disposal capacity through the 2050 vision horizon. Utilizing the most recent population projections provided by Charlotte County staff, the County will have a need for

7,125,297 cubic yards of disposal capacity from 2030 through 2050. The Calusa Green landfill is proposed to provide 30,000,000 cubic yards of capacity through its useful life. Therefore, the proposed Calusa Green solid waste disposal facility will provide the added disposal capacity required to service County residents through both the 2030 planning horizon and the 2050 vision horizon.

It is also noted that the current population projections are greatly diminished from those utilized in the 2050 Plan analysis. The declining projections likely result from the reduced growth experienced by Charlotte County and the State of Florida during the current economic recession. However, the efforts of the Charlotte County Board of County Commissioners and the Economic Development staff have placed Charlotte County in a better position to experience higher growth in the future than the recent past would predict. Consequently, Charlotte County is likely to require even greater solid waste disposal capacity than what is shown in this needs analysis.

## Permanent Population Landfill Usuage

Remaining capacity of Landfill in CY

1 CY = 1263 IBS

Level of Service in Pounds

4,674,295 \*

1263 \*\*

5

Year	Permanent Population	CY/Population/Year	Total CY Remaining
			4,674,295
2008	163,245	235,885	4,438,410
2009	162,567	234,905	4,203,506
2010	159,978	231,164	3,972,342
2011	161,582	233,482	3,738,860
2012	163,187	235,800	3,503,059
2013	164,791	238,119	3,264,941
2014	166,396	240,437	3,024,504
2015	168,000	242,755	2,781,748
2016	169,700	245,212	2,536,537
2017	171,400	247,668	2,288,868
2018	173,100	250,125	2,038,744
2019	174,800	252,581	1,786,162
2020	176,500	255,038	1,531,125
2021	178,140	257,408	1,273,717
2022	179,780	259,778	1,013,939
2023	181,421	262,148	751,792
2024	183,061	264,518	487,274
2025	184,701	266,888	220,386
2026	186,281	269,171	-48,785
2027	187,861	271,454	-320,239
2028	189,441	273,737	-593,976
2029	191,021	276,020	-869,996
2030	192,601	278,303	-1,148,299
2031	194,081	280,441	-1,428,740
2032	195,561	282,580	-1,711,320
2033	197,040	284,718	-1,996,038
2034	198,520	286,856	-2,282,894
2035	200,000	288,994	-2,571,888
2036	201,340	290,931	-2,862,819
2037	202,680	292,868	-3,155,687
2038	204,021	294,804	-3,450,491
2039	205,361	296,741	-3,747,232
2040	206,701	298,677	-4,045,909
2041	207,921	300,440	-4,346,349
2042	209,141	302,202	-4,648,551
2043	210,360	303,965	-4,952,516
2044	211,580	305,728	-5,258,244
2045	212,800	307,490	-5,565,734

Remaining capacity of Landfill in CY		4,674,295 *	
1 CY = 1263 IBS		1263 **	
Level of Service in Pounds		5	
Year	Permanent Population	CY/Population/Year	Total CY Remaining

Year	Permanent Population	CY/Population/Year	Total CY Remaining
2046	213,820	308,964	-5,874,698
2047	214,840	310,438	-6,185,136
2048	215,861	311,913	-6,497,049
2049	216,881	313,387	-6,810,436
2050	217,901	314,861	-7,125,297

## Note

<sup>\*</sup> Infastructure Solid Waste-Data and Analysis July 2010 Adoption (Page 5)

<sup>\*\*</sup> CDM Capacity Evaluation Date February 25, 2009 (page 7 and Appedix D)